

Appl. No. : 10/663,374
Filed : September 16, 2003

STATUS OF THE CLAIMS

1. (Withdrawn) A method for removing injection-moulded parts from an injection-moulding machine and transferring the injection-moulded parts onto a conveying device, an arm of a removal device being made to move into a parting plane between opened mould halves, the injection-moulded parts being removed from mould cavities of a mould half and transferred from the injection-moulding machine to a transfer device, which takes over the injection-moulded parts from the removal device and deposits them on a conveying path, the method comprising;

providing an injection-moulding machine with a multi-daylight mould which has more than two parting planes between a number of mould halves;

simultaneously removing the injection-moulded parts in all the parting planes by means of a removal device, which has arms which correspond in their number to the number of parting planes;

moving the removal device into a first transfer position, in which the injection-moulded parts from one group of arms are deposited by a transfer unit on a first conveying path; and

further moving the removal device into at least a second transfer position, in which the injection-moulded parts from a further group of arms are deposited by a further transfer unit on a second conveying path.

2. (Withdrawn) A method for removing injection-moulded parts from an injection-moulding machine and transferring the injection-moulded parts onto a conveying device, an arm of a removal device being made to move into a parting plane between opened mould halves, the injection-moulded parts being removed from mould cavities of a mould half and transferred from the injection-moulding machine to a transfer device, which takes over the injection-moulded parts from the removal device and deposits them on a conveying path, the method comprising:

providing an injection-moulding machine with a multi-daylight mould which has more than two parting planes between a number of mould halves;

simultaneously removing the injection-moulded parts in all the parting planes by means of a removal device, which has arms which correspond in their number to the number of parting planes;

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moving the removal device into a transfer position, in which the injection-moulded parts from all the arms are taken over by the transfer device, whereupon at least one of at least two units of the transfer device is moved into a transfer position; and

depositing the injection-moulded parts by the individual units of the transfer device on the assigned conveying paths.

3. (Original) An injection-moulding machine with a handling system for injection-moulded parts, comprising an arm of a removal device, which can be made to move into and out of a parting plane between opened mould halves, and a transfer device, which takes over the removed injection-moulded parts from the arm of the removal device and deposits them on a conveying path, wherein the injection-moulding machine comprises:

a multi-daylight mould with more than two parting planes between a number of mould halves and wherein the removal device has a number of arms corresponding to the number of parting planes of the multi-daylight mould;

at least two transfer devices arranged offset in relation to one another; and

at least two conveying paths which lie next to one another and are assigned to the transfer units.

4. (Original) The injection moulding machine of Claim 4, wherein the transfer units comprise pivotable transfer plates which can be pivoted by an actuating device through approximately 90° into a transfer position.

5. (Original) An injection-moulding machine with a handling system for injection-moulded parts, comprising at least one arm of a removal device, which can be made to move into and out of a parting plane between opened mould halves, and a transfer device, which takes over the removed injection-moulded parts from the arm of the removal device and deposits them on a conveying path, wherein the injection-moulding machine comprises a multi-daylight mould with more than two parting planes between a number of mould halves wherein the removal device has a number of arms corresponding to the number of parting planes of the multi-daylight mould, and wherein the transfer device is subdivided into at least two units, of which at least one unit can be made to move into a transfer station over the assigned conveying path.

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6. (Original) The injection moulding machine of Claim 5, wherein the transfer units comprise pivotable transfer plates which can be pivoted by an actuating device through approximately 90° into a transfer position.

7. (Original) The injection moulding machine of Claim 5, comprising a guide of the removal device extending over the multi-daylight mould or outside the latter and over the transfer device transversely in relation to the longitudinal axis of the injection-moulding machine and the direction of movement of the conveying path, and wherein the arms of the removal device protrude downwards from the guide.